OEM ENGINEERING REFERENCE / 2026

Technical catalogue

NETHRAA HI-TECH ENGINEERING



Manufacturing processes • Equipment directory • Product data sheets

Coimbatore, India | European business development: Dresden, Germany

Drawing-based manufacturing | Project-specific engineering

02 Process and material scope

03–08 Equipment directory

09–12 Product data sheets

13 Assembly and production reference

14 Quality, RFQ and contact

Process and material scope

Established in 1989. Drawing-based manufacturing of formed, welded and machined metal components for pump and motor OEMs and custom engineering applications.

01
Raw material and coil preparation

02
Cutting and blanking

03
Rolling and bending

04
Welding and fabrication

05
Expansion, sizing and pressing

06
Conventional and CNC machining

07
Inspection and dispatch

Materials

Stainless steel grades 202, 304, 316, 409, 410 and 430; mild steel. Grade, thickness and supply
condition to be agreed for each drawing.

Equipment 01–03

01 AUTOMATIC CUTTING & BLANKING LINE



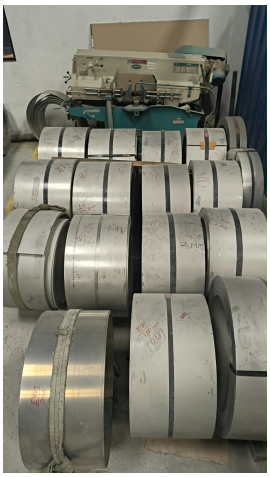
Coil feed: integrated uncoiler and feed path

Press: hydraulic-actuated cutting station

Controls: operator panel with cycle controls

Blank dimensions: tooling-dependent

02 METAL CUTTING EQUIPMENT & COIL STOCK



Input: sheet and slit-coil stock

Application: preparation of sheet and coil blanks

Workholding and cut size: job-specific

RFQ inputs: sheet grade, thickness and blank size

03 WELDOR SHEET METAL SHEAR



Make: WELDOR

Cutting mechanism: mechanical shear

Front work supports: fitted

Application: straight cuts for downstream forming

Equipment selection is based on part geometry, material and tooling.

Equipment 04–06

04 SHEET METAL ROLLING MACHINE — BLUE



Drive: geared roller assembly

Roll gap: manual handwheel adjustment

Application: cylindrical sheet forming

Minimum diameter: material-dependent

05 HYDRAULIC SHEET METAL BENDING MACHINE



Actuation: hydraulic cylinder

Tooling: interchangeable forming arrangement

Bed: extended linear working area

RFQ inputs: bend length, radius and thickness

06 MOTORIZED SHEET METAL ROLLING MACHINE



Drive: electric motor and gearbox

Roll adjustment: handwheels

Working rollers: paired forming rolls

Application: forming cylindrical sleeves

Equipment selection is based on part geometry, material and tooling.

Equipment 07–09

07 VERTICAL TUBE EXPANDING MACHINE



Tooling: segmented expanding mandrel

Orientation: vertical, floor-mounted

Operation: expanding/sizing cycle

Diameter range: tooling-dependent

08 PANASONIC WELDING STATION



Power source: Panasonic

Process: arc welding

Workpiece: cylindrical sleeve assemblies

RFQ inputs: seam design and weld acceptance

09 H-FRAME HYDRAULIC PRESS — NO. 2



Frame: H-frame construction

Ram: vertical hydraulic cylinder

Monitoring: pressure gauge

Application: die-based pressing and forming

Equipment selection is based on part geometry, material and tooling.

Equipment 10–12

10 H-FRAME HYDRAULIC PRESS



Application: heavy-duty die-based pressing

Structure: heavy H-frame

Actuation: vertical hydraulic ram

Tools: application-specific dies

11 HEAVY-DUTY TUBE EXPANDING MACHINE



Expansion: segmented mandrel

Machine: heavy-duty floor station

Workpiece: long cylindrical sleeves

RFQ inputs: sleeve diameter and length

12 UDAY HEAVY-DUTY CONVENTIONAL LATHE



Brand: UDAY

Configuration: horizontal engine lathe

Drive: belt/pulley transmission

Application: cylindrical component machining

Equipment selection is based on part geometry, material and tooling.

Equipment 13–15

13 SHAKTI 30-TON MECHANICAL POWER PRESS



Brand: Shakti

Owner-reported force: 30 ton

Drive: mechanical flywheel/crank

Application: repetitive die-based presswork

14 FOUR-COLUMN HYDRAULIC PRESS WITH DIES



Frame: four-column guided

Drive: hydraulic cylinder

Tooling: removable dies and fixtures

RFQ inputs: die geometry and forming load

15 HYDRAULIC FORMING / FEEDING STATION



Power pack: electric motor and pump

Hydraulic distribution: valve manifold

Work area: longitudinal bed and fixture

Application: hydraulic tooling support

Equipment selection is based on part geometry, material and tooling.

Equipment 16–18

16 VERTICAL HYDRAULIC PRESS — NO. 8



Station ID: 8

Drive: hydraulic ram

Controls: dedicated operator panel

Application: vertical die-based pressing

17 VERTICAL HYDRAULIC PRESS — NO. 7



Station ID: 7

Drive: hydraulic ram

Controls: dedicated operator panel

RFQ inputs: component and die geometry

18 NEO TECH CNC TURNING CENTRE



Make: NEO TECH

Control: CNC operator interface

Tooling: indexing turret

RFQ inputs: diameters, datums and finish

Equipment selection is based on part geometry, material and tooling.

Product reference 01–02

Open-well pump housing



Material (SS)	304
Internal diameter (mm)	112–140
Outer diameter (mm)	Per drawing
Length (mm)	300 (sample)
Wall thickness (mm)	Per drawing
Reported monthly volume	10,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Borewell motor housing



Material (SS)	Per drawing
Internal diameter (mm)	92
Outer diameter (mm)	96
Length (mm)	700
Wall thickness (mm)	2 (nominal)
Reported monthly volume	5,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Dimensions are indicative reference configurations; acceptance per approved drawing.

Product reference 03–04

Submersible pump casing



Material (SS)	304
Internal diameter (mm)	Per drawing
Outer diameter (mm)	Per drawing
Length (mm)	Up to 2,000
Wall thickness (mm)	Per drawing
Reported monthly volume	By quotation
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Open-well motor shell



Material (SS)	304/316
Internal diameter (mm)	126
Outer diameter (mm)	130
Length (mm)	Per drawing
Wall thickness (mm)	2
Reported monthly volume	10,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Dimensions are indicative reference configurations; acceptance per approved drawing.

Product reference 05–06

Oil-cooled motor shell



Material (SS)	304/316
Internal diameter (mm)	92
Outer diameter (mm)	96
Length (mm)	Per drawing
Wall thickness (mm)	2
Reported monthly volume	15,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Sewage motor housing



Material (SS)	304/316
Internal diameter (mm)	137
Outer diameter (mm)	140
Length (mm)	Per drawing
Wall thickness (mm)	1.5
Reported monthly volume	8,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Dimensions are indicative reference configurations; acceptance per approved drawing.

Product reference 07

Shallow-well pump housing



Material (SS)	304/316
Internal diameter (mm)	Custom
Outer diameter (mm)	Custom
Length (mm)	Custom
Wall thickness (mm)	Per drawing
Reported monthly volume	3,000
Acceptance criteria	Per approved customer drawing and agreed inspection plan

Dimensions are indicative reference configurations, not a guaranteed manufacturing envelope.

Engineering design inputs

Diameter and wall thickness define the nominal shell geometry.

Nominal wall thickness = (outside diameter - inside diameter) / 2.

Specify roundness, concentricity and critical mating surfaces on the drawing.

Define weld seam position, surface finish and acceptance criteria.

Production reference



Motor housing assembly — internal core view; customer-specific design.

Open-well pump housing	10,000 units/month
Borewell motor housing	5,000 units/month
Submersible pump casing	By quotation
Open-well motor shell	10,000 units/month
Oil-cooled motor shell	15,000 units/month
Sewage motor housing	8,000 units/month
Shallow-well pump housing	3,000 units/month

Combined reported volume: 51,000 units/month across six families. Not a guaranteed available capacity or annual output.

Engineering requirements & RFQ

Agree the following during feasibility review:

Material	Grade, thickness, supply condition and required certificates
Geometry	ID, OD, length, wall, roundness, concentricity and critical datums
Joining	Weld process, seam requirements, acceptance criteria and any testing
Machining	Critical interfaces, threads, grooves, faces and surface finish
Inspection	Measurement method, sampling, records and release criteria
Packaging	Protection, labelling, traceability and shipment requirements

Project acceptance criteria are agreed during engineering review.

Technical enquiry checklist

Drawing package	2D drawing, revision and 3D CAD if available
Material	Grade, thickness and applicable standards
Quantity	Prototype, batch and estimated annual demand
Requirements	Critical tolerances, welds, finish and inspection
Commercial	Delivery location, target schedule and packaging

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